



CORDELL BANK, GULF OF THE FARALLONES AND MONTEREY BAY
NATIONAL MARINE SANCTUARIES
JOINT MANAGEMENT PLAN REVIEW

MARITIME HERITAGE RESOURCES – Draft Action Plan
May 29, 2003

***Please Note:** The CBNMS, GFNMS, MBNMS, and the Sanctuary Advisory Councils have tasked the management plan working groups with development of draft action plans that characterize the issue or problem and identify strategies and activities that address the issue. The working groups will develop these strategies and activities as they meet over the next several months. With this goal in mind, the progress of the group, the decisions, areas of agreement will be outlined in a progressively developed action plan identifying draft goals, issue characterizations, and strategies and activities. Members of the group as well as other interested parties should look to this draft action plan as it develops as a way of tracking the group's progress and decisions.*

Background

The area encompassed by the Cordell Bank National Marine Sanctuary (CBNMS), the Gulf of the Farallones National Marine Sanctuary (GFNMS), and the Monterey Bay National Marine Sanctuary (MBNMS) is rich in cultural and archaeological resources, and has a long and interesting maritime history.

The history of California's Central Coast is predominantly a maritime one. From the days of the early Ohlone inhabitants to the present, coastal waterways remain a main route of travel and supply. Ocean-based commerce and industries (e.g., fisheries, extractive industries, export and import, and coastal shipping) are important to the maritime history, the modern economy, and the social character of this region. For example, regional fishing communities dating back to the middle of the 19th century are distinctive for their rugged, individualistic culture born of a hard and sometime dangerous life at sea harvesting fish. The fishing boats, fish houses, and other parts of the fishery infrastructure lend to the character of the West Coast sanctuaries as does the knowledge possessed by working men and women of the ocean waters they ply for their livelihoods.

Ports such as San Francisco and Monterey, and smaller coastal harbor towns, developed through fishing, shipping, and economic exchange. Today these have become major urban areas, bringing large numbers of people in proximity to National Marine Sanctuaries. Many of these people are connected to the sanctuaries through commercial and recreational activities such as surfing, boating, and diving.

During public scoping meetings the need for CBNMS, GFNMS, and MBNMS to protect and to better educate the public about maritime heritage resources was identified.

Problem Statement

Modern researchers could illuminate many aspects of our predecessors' lives through careful excavation and analysis of submerged remains located in the CBNMS, GFNMS, and MBNMS.

Archaeological sites are sealed time capsules that provide windows to the past, allowing us to glimpse earlier peoples and the ways they lived, worked, played, and died. Sanctuary waters, likewise, hold remains of our ancestor's past lives. The sea floor preserves remnants of the sites where people lived and of the vessels in which they conducted trade and fought wars. Ships, boats, wharves, lighthouses, lifesaving stations, whaling stations, prehistoric sites, and a myriad other heritage treasures lie covered by water, sand, and time.

Records indicate that 430 vessel and aircraft losses were documented between 1595 and 1950 along California's Central Coast from Cambria north to Bodega Head, including the Farallon Islands: 173 in the GFNMS, 257 in the MBNMS; and to date none documented within the CBNMS. Some sites have been located and inventoried by NOAA and the National Park Service in the GFNMS region. The GFNMS and MBNMS have also collaborated with state and federal agencies, and the private sector to gather resource documentation and to create opportunities to locate and record submerged archaeological resources. MBNMS has recently contracted services to complete a shipwreck inventory from established shipwreck databases and review of primary and secondary source documentation. These studies provide a foundation for an inventory of the historic resources in the sanctuaries.

The GFNMS and MBNMS, and possibly CBNMS, are now faced with a new challenge of identifying and monitoring historic and non-historic shipwrecks that may pose environmental threats to sanctuary marine resources. Lurking in the deep are the hazardous cargoes, abandoned fuel, and unexploded ordnance inside sunken vessels that are slowly deteriorating in a corrosive marine environment. Shipwrecks already identified as a concern are the oil tanker *Montebello* (near the MBNMS) that may retain over 3 million gallons of unrefined crude oil and the C-3 freighter *Jacob Luckenbach* (GFNMS) containing Bunker-C fuel oil. In 2002, the U.S. Coast Guard contracted the removal of 85,000 gallons of Bunker-C fuel from the *Jacob Luckenbach*.

Goals

The National Marine Sanctuary Act mandates the management and protection of submerged archaeological sites. Therefore, the National Marine Sanctuary Program (NMSP) is identifying submerged heritage resources and developing education and preservation plans regarding these resources. Program efforts include: conducting paleo-ecological and archaeological studies; inventorying, locating, and monitoring both historic shipwrecks and those that pose an environmental threat to sanctuary marine resources; and characterizing and protecting heritage resources.

This plan provides the framework for a Maritime Heritage Resources Program that addresses such underwater sites, as well as traditional heritage resources such as Native American and fishing communities, commercial marine transport of passengers and cargo, and recreational activities like diving, surfing, and boating. Although protection status is given only to archaeological resources, traditional user and ocean dependent groups are interconnected with the sanctuaries.

Strategies

Establish Program(s) - CBNMS, GFNMS, and MBNMS are just beginning to design efforts to ensure public awareness, understanding, appreciation, and wise and sustainable use of the historical, cultural, and archaeological resources. A well-coordinated program will be required to identify and assess documented shipwrecks, some of which may pose significant environmental hazards; to protect sites from unauthorized disturbance; and to develop heritage partnerships and education programs.

Submerged Site Inventory and Assessment Initiative - NMSP regulations mandate that archaeological resources be managed consistent with the Federal Archaeological Program. The NMSP's Submerged Cultural Resources Program (SCRCP) was established in 2002 to emphasize the need for research, education, outreach, and protection of heritage resources. Issues to be addressed regarding the protection of submerged archaeological resources include site protection, permitting, and shipwrecks as environmental threats. GFNMS and MBNMS will partner with the Channel Island National Marine Sanctuary (CINMS) on its Shipwreck Reconnaissance Program (SRP) in California waters to record submerged sites using avocational archaeologists, remotely operated vehicles (ROV), and manned submersibles. The SRP develops underwater site maps and archaeological reports, conducts annual site monitoring, and recommends appropriate sites for inclusion to the National Register for Historic Places. NOAA Maritime Heritage Resources staff at NMSP, and in various sanctuaries, can provide a resource that the sanctuaries can draw from in planning maritime heritage programs and in mitigating impacts to resources.

Shipwrecks as Environmental Threats – GFNMS and MBNMS both coordinate with the Damage Assessment Restoration Fund and other relevant agencies. GFNMS and MBNMS will work with CINMS to expand their efforts to identify shipwrecks that may pose environmental threats and will provide pertinent information to NOAA's HAZMAT division and the National Marine Sanctuary Program for the development of SHIELDS (Sanctuaries Hazardous Incident Emergency Logistics Database System) and RUST (Resources and Under Sea Threats) database systems.

Site Protection– As submerged shipwreck sites are inventoried in CBNMS, GFNMS, and MBNMS and become more visible to the public, they are also more at risk from divers wishing to loot artifacts. CBNMS, GFNMS, and MBNMS will consider enhancing visitor usage while mitigating damage to heritage resources by providing the sport and commercial diving communities and visitors to shoreline sites with interpretive information about archaeological sites and their protection. Sanctuary and California State regulations prohibit the un-permitted disturbance of submerged archaeological and historical resources. The NMSP and California State Lands Commission have an archaeological resource recovery permit system in place. Protection and monitoring of these sites will become a more pronounced responsibility in the sanctuaries' heritage resources management program. Partnerships will be established with local law enforcement agencies for site monitoring and compliance of public access to submerged sites. The sanctuaries will designate a contact person(s) to coordinate with the California State Historic Preservation Office (SHPO) to ensure that permit guidelines, under the Archaeological Resources Protection Act, are followed.

Traditional User and Ocean Dependent Groups - There is the potential to cultivate partnerships with local, state, and federal programs (e.g., American Folk Life Center, universities, Department of the Interior) and the identified communities. These partnerships could aid in the design and implementation of studies of living maritime heritage and folk life to help educate the public about traditional cultures and practices including Native Americans, other ethnic residents, fishermen and economic activities reflecting historic human interaction with the ocean.

Education and Outreach - CBNMS, GFNMS, and MBNMS have partnered with CINMS in the development of the West Coast Shipwreck Database online curriculum. The database serves to inform the public about the historical significance of shipwrecks, including those that pose environmental threats to sanctuary marine resources, i.e. *Jacob Luckenbach* story. The database is being expanded to include living journals that assist families searching for information about shipwrecked vessels that their relatives may once have served on as crewmember or passenger. Family members are encouraged to share with the public their living journals associated with the shipwreck histories for dissemination. CBNMS, GFNMS, and MBNMS will identify partners to explore exhibit development at maritime or regional museums and learning centers that focus on the areas' maritime heritage history; shipwrecks, exploration, fishing, and fisheries; vessel trades, routes and nationalities; shoreline structures such as lighthouses, lifesaving stations, canneries, whaling facilities, surfing, and boating.

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STRATEGY X-MHR.1

Establish Maritime Heritage Resources Program(s) in CBNMS, GFNMS, and MBNMS

The National Marine Sanctuary Program is placing increasing emphasis on the development of maritime heritage resources programs to identify and protect submerged archaeological sites, and to increase public awareness about the maritime history associated with individual sanctuaries. CBNMS, GFNMS, and MBNMS are just beginning to design efforts to ensure public awareness, understanding, appreciation, and wise and sustainable use of the historical, cultural, and archaeological resources. A well-coordinated program will be required to identify and assess documented shipwrecks, some of which may pose significant environmental hazards; to protect sites from unauthorized disturbance; and to develop heritage partnerships and education programs.

Phase I (First Steps)

Activity A: Develop the foundation and infrastructure of such a program, including staffing, and work with sanctuary managers on whether this will be a site-specific or a shared endeavor, among the sanctuaries.

Activity B: Incorporate maritime heritage resources program and action plan strategies into the annual operating plans (AOP) of GFNMS, MBNMS, and CBNMS for implementation.

Phase II (Second Steps)

Activity C: Identify and pursue additional sources of funding (beyond NMSP) to support Sanctuary, and other, maritime heritage resource efforts, such as:

- Exhibits
- Research
- Archaeological field work, survey
- Outreach and education

Activity D: Identify and assist partners doing maritime heritage related work to obtain funding and resources.

Potential Partners – see appendix

Timeline:

- *Identify program coordinator(s) and develop infrastructure:* Within 6 months of final plan
- *Identify appropriate strategies for AOP:* Spring 2004 (for FY2005) and annually thereafter

STRATEGY X-MHR.2

Develop, Implement, and Maintain a Submerged Site Inventory and Assessment Initiative

With the passage of the National Historical Preservation Act (NHPA) in 1966, federal agencies are responsible for protecting the heritage resources on public lands and within their aegis. NHPA directs federal land management agencies to inventory historic and archaeological resources and to assess them for eligibility to the National Register of Historic Places.

The CBNMS, GFNMS, and MBNMS will collaborate with state and federal agencies, and the private sector to gather resource documentation and to create opportunities to locate and record submerged archaeological resources. This effort will also be coordinated with NOAA's Maritime Archaeology Center (MAC).

Phase I (First Steps)

Activity A: Establish partnerships with other federal, state, and local agencies as well as avocational archaeologists, commercial divers and fishermen, and recreational divers to identify and inventory potential shipwreck sites.

- Review primary and secondary source documentation including established shipwreck databases
- Interview commercial divers and fishermen, recreational divers and avocational archaeologists
- Review and update existing site characterizations and shipwreck assessments

Phase II (Second Steps)

Activity B: Conduct systematic research and survey for material remains of both prehistoric archaeological sites as well as historic sites that include shipwrecks. Establish geographic regions for high probability of cultural and historic remains for remote sensing surveys and/or diver investigations. Develop underwater site maps and archaeological reports and site monitoring program.

- Establish site monitoring program that includes documenting new artifact discoveries and evaluation of human disturbance
- Record site positions in GFNMS/MBNMS/NOAA's ARCH geographic information systems (GIS)
- Establish a Shipwreck Reconnaissance Program, similar to CINMS, to record and monitor submerged sites

Phase III (Opportunistic)

Activity C: Assess and nominate appropriate submerged archaeological sites for inclusion to the National Register of Historic Places.

Potential Partners – see appendix

Timeline:

STRATEGY X-MHR.3**Assess Shipwrecks and Other Submerged Structures for Potential Hazards**

The GFNMS and MBNMS, and possibly CBNMS, are now faced with a new challenge of identifying and monitoring historic and non-historic shipwrecks that may pose environmental threats to sanctuary marine resources. Information pertaining to shipwrecks as environmental threats is provided to NOAA's HAZMAT division and the Office of National Marine Sanctuaries for the development of SHIELDS (Sanctuaries Hazardous Incident Emergency Logistics Database System) and RUST (Resources and Under Sea Threats) database systems. The sanctuaries will develop a plan to address this issue since there are many shipwrecks that pose threats in the near future.

Phase I (First Steps)

Activity A: Establish an inventory of shipwrecks, inside and outside of Sanctuary boundaries, that may pose environmental threats to Sanctuary marine resources

- Review primary and secondary source documentation from established shipwreck databases
- Interview commercial divers and fishermen, and recreational divers
- Integrate, collaborate with others doing similar research

Activity B: Coordinate exchange of information pertaining to shipwrecks as environmental threats with NOAA's HAZMAT division and the Office of National Marine Sanctuaries for the development of SHIELDS (Sanctuaries Hazardous Incident Emergency Logistics Database System) and RUST (Resources and Under Sea Threats) database systems.

Phase II (Second Steps)

Activity C: Recommend target shipwreck sites to be located, conduct reconnaissance dives and report findings to federal and state trustees.

Activity D: Establish a monitoring program for shipwreck sites that have been located and are considered a threat to sanctuary marine resources. Develop protocols for site evaluation and a timeline for future site monitoring.

Activity E: For historic shipwrecks, ensure compliance under Section 106 of the National Historic Preservation Act (NHPA) and the National Marine Sanctuary Act (NMSA). Compile and review final reports of post site disturbance documentation and/or archaeological site reports. Provide California State Historic Preservation Office with final report.

Potential Partners – see appendix

Timeline:

STRATEGY X-MHR.4

Manage and Protect Submerged Archaeological Resources Within GFNMS and MBNMS (and CBNMS?)

The National Marine Sanctuary Program regulations mandate that archaeological resources be managed consistent with the Federal Archaeological Program. The NMSP's Submerged Cultural Resources Program (SCRCP) was established in 2002 to emphasize the need for research, education, outreach, and protection of heritage resources. Issues to be addressed by GFNMS, MBNMS, and possibly CBNMS, regarding the protection of submerged archaeological resources include:

- Permitting
- Site protection through enforcement and education (linked to Strategy X-MHR.6 Strategy X-MHR.6 Develop and Implement Education and Outreach Programs)
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- Shipwrecks as environmental threats (linked to Strategy X-MHR.3 Assess Shipwrecks and Other Submerged Structures for Potential Hazards)

Phase I (First Steps)

Activity A: Develop protocol to manage, monitor, and protect submerged sites.

Activity B: Provide training to sanctuary staff and facilitate training partners regarding the importance of submerged resources and the need and tools to protect them.

Activity C: Identify partnerships with local law enforcement agencies for site monitoring and compliance of public access to submerged sites.

Phase II (Second Steps)

- **Activity D:** Develop and implement an interpretive enforcement program (linked to Strategy X-MHR.6 Strategy X-MHR.6 Develop and Implement Education and Outreach Programs)
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Activity E: Identify archaeological and historic resources currently outside Sanctuary boundaries and explore appropriateness of expanding boundaries to protect site(s) as maritime heritage resources.

Phase III (Opportunistic)

Activity F: Investigate potential for mooring system in collaboration with affected parties (e.g. USCG, fishing communities)

Potential Partners – see appendix

Timeline:

STRATEGY X-MHR.5
Maritime Heritage Aspects of
Traditional User and Ocean Dependent Groups

A key aspect of the CBNMS, GFNMS, and MBNMS maritime heritage program will be to educate the public about traditional maritime cultures and practices including Native Americans; ethnic groups; whalers; historic and present-day fishermen; recreational uses; and traditional shipping, shipbuilding, canneries, and other economic activities reflecting historic human interaction with the ocean. Although protection status is given only to archaeological resources, traditional user and ocean dependent groups are interconnected with the sanctuaries. Therefore, this program will also acknowledge those traditional heritage activities and practices that are consistent with the National Marine Sanctuary Act, such as sustainable fishing methods and recreational uses.

Phase I (First Steps)

Activity A: Identify traditional user and ocean dependent groups. Solicit their ideas, values, etc., to prioritize appropriate aspects of their maritime heritage. Promote historical, anthropological, and ethnographic research on these traditionally associated people to support mapping and interpretive programs.

Activity B: Create an inventory of historic and present maritime heritage communities. Assess and nominate appropriate sites for the National Register of Historic Places.

- Conduct a literature search and gather resource documentation
- Map/document traditional communities and sites, such as:
 - Fishing and whaling
 - Shipping/commercial marine transport of passengers and cargo
 - Lighthouses, life-saving stations
 - Tribal (coastal)
 - Recreational uses such as surfing and diving

Phase II (Second Steps)

Activity C: Develop collaborative programs/initiatives. These may include:

- Sustainable seafood events
- Adopt-A-Boat-classrooms are paired up with active fishermen to learn about maritime heritage (SEA-Grant in Maine does this now)
- Historic re-enactments at harbors, Native American village sites

Potential Partners – see appendix

Timeline:

STRATEGY X-MHR.6

Develop and Implement Education and Outreach Programs

Maritime Heritage provides a unifying theme to educate and inform people along the California coast and throughout the country about the historic human interaction with the ocean. Through websites, museum exhibits, and other tools, the Sanctuaries will provide information on:

- Programs by and about traditional cultures and practices including Native Americans, ethnic groups, fishermen, and economic activities
- Shipwrecks, exploration, fishing and fisheries; trade vessels, routes and nationalities
- Shoreline structures such as lighthouses, life-saving stations, canneries, whaling facilities
- Traditional recreational activities such as diving, surfing, and boating
- Stewardship of our cultural and historic maritime resources

Phase I (First Steps)

Activity A: Improve information sharing and dialogue between CBNMS, GFNMS, MBNMS and traditional users/ocean dependent groups regarding issues that may impact them as “living maritime heritage communities.”

Activity B: Create, expand and populate individual sanctuary websites with specific information about maritime heritage resources, such as:

- Shipwreck Database
- Living journals of traditional users and ocean dependent groups as well as shipwreck survivors
- Archaeological project updates
- Potential environmental threats
- Maps

Phase II (Second Steps)

Activity C: Develop and implement education and outreach programs for the maritime heritage program. Incorporate traditional users/ocean dependent groups and submerged archaeological resources throughout existing and new sanctuary education/outreach programs (e.g., lectures, brochures, exhibits, posters).

Activity D: Collaborate on potential maritime heritage resource exhibits. Investigate and develop opportunities with partners to interpret maritime heritage sites to the public, such as:

- Exhibits, kiosks and displays at museums, visitor and learning centers, other attractions
- Trails, signage, videos, etc.
- Public lectures

Potential Partners – see appendix

Timeline:

Appendix – List of Potential Maritime Heritage Program Partners

Federal agencies:

Other National Marine Sanctuaries - Olympic Coast, Channel Islands, Thunder Bay, Hawaiian Islands
NOAA National Marine Fisheries Service
NOAA Maritime Archaeology Center (MAC)
NOAA Office of Exploration
NOAA Hazardous Materials Response Division (HAZMAT)
NOAA Office of Response and Restoration
U.S. Coast Guard
U.S. Geological Survey
U.S. Environmental Protection Agency
U.S. Navy
National Park Service - Point Reyes National Seashore, Golden Gate National Recreational Area,
San Francisco Maritime National Historic Park, Advisory Council For Historic Preservation
Minerals Management Service

State agencies:

California Department of Parks and Recreation (State Parks)
California State Lands Commission
California Department of Transportation (Caltrans)
California Department of Fish and Game, Office of Spill Prevention and Response (OSPR)
California State Historic Preservation Office (SHPO)

Non-governmental organizations:

Nautical Archaeology Society (NAS)
American Folklife Center
Native American groups - Rumsian, Ohlone, Federated Indians of Graton Rancheria, etc.
Multi-cultural historical societies
Universities and research institutions – graduate projects, internships etc.
Maritime Museum of Monterey
Other maritime museums, natural history museums and historical societies
San Mateo Coast Natural History Association (SMCNHA)
Coastal Maritime Archaeology Resources (CMAR)
Pacific Coast Federation of Fishermen's Associations (PCFFA)
Half Moon Bay Fisherman's Marketing Association (HFBFMA)
Alliance of Communities For Sustainable Fisheries
Farallones Marine Sanctuary Association (FMSA)
Monterey Bay Sanctuary Foundation (MBSF)
Recreational user group associations, local dive groups in central California